



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: February 10, 2009

TO: Mayor and Councilmembers

FROM: Engineering Division, Public Works Department

SUBJECT: Outdoor Lighting And Streetlight Design Guidelines

RECOMMENDATION:

That Council hear a report from the Streetlight Design Guidelines Advisory Group and adopt, by reading of title only, A Resolution of the Council of the City of Santa Barbara Establishing And Approving The City's Outdoor Lighting And Streetlight Design Guidelines Dated As Of February 10, 2009.

DISCUSSION:

Over the past several years, City streetlight related issues have been discussed in detail by the City Boards and Commissions on a case-by-case basis as projects are reviewed through the City's development review process. Certain streetlight issues and concerns continue to resurface, such as appropriate illumination, available streetlight pole-type and light-fixture style, streetlight aesthetics, light pollution, and City fiscal impacts pertaining to maintenance of poles and fixtures. Primary areas of concern pertain to the aesthetics of the "cobra head" style light fixture, and fiscal issues associated with maintaining and installing streetlight poles and fixtures.

In response to these ongoing concerns, on March 22, 2005, Council formally established a City Streetlight Design Guidelines Advisory Group (Advisory Group) to evaluate issues and propose recommendations for Council to consider for adoption. The Advisory Group consists of representatives of Council, Planning Commission, Historic Landmarks Commission, Architectural Board of Review, Transportation and Circulation Committee, and City staff.

The goals of the Advisory Group are as follows:

- a) Review established lighting in the City, identify issues, and recommend improvements.
- b) Establish lighting styles in areas where none exist.

- c) Recommend additional lighting styles, as deemed appropriate, to increase the City inventory.
- d) Evaluate fiscal impacts pertaining to maintenance and proposed improvements; Draft Streetlight Guidelines for Council's consideration.

The Advisory Group made several presentations to each of the Boards and Commissions listed above and to the Single Family Design Board. At the meetings, staff also received public input. The Boards and Commissions have unanimously recommended that the proposed Outdoor Lighting and Streetlight Design Guidelines (Attachment 1) be forwarded to Council for formal approval.

Additionally, the Advisory Group updated the 1997 adopted Outdoor Lighting Design Guidelines, as it was opportune to combine the existing Outdoor Lighting Guidelines with the Streetlight Design Guidelines for convenience and consistency. A summary of changes to the current Outdoor Lighting Guidelines is included as Attachment 2.

The proposed Streetlight Design Guidelines include the following highlights:

- Light pollution shall be minimized.
- New and retrofitted existing light fixtures shall be as energy efficient as feasible.
- Streetlights should have a city-wide consistent theme, within which variation can occur.
- Standardize a limited number of pole and fixture combinations.
- The cobra head light fixture shall be phased out over time on a project by project basis.
- Integrate existing and new guidelines for appropriate locations of streetlights and requests for new streetlights.
- Maximize improvements in aesthetics, functionality, energy efficiency, and maintenance by the most cost effective means.
- Enhance safety and security for pedestrians.
- Establish streetlight styles in areas where none exist.
- Address streetlight fiscal impacts.
- A City Streetlight Style and Location Map that identifies the existing streetlights within the City. The map also includes recommended poles and light fixtures.

A standard City development condition of approval for streetlights related to new developments and subdivisions will be prepared by the City Attorney's Office. It will provide that the placement and standards for new City streetlights will be determined by the City Engineer on a project by project basis in accordance with the Streetlight Design Guidelines.

BUDGET/FINANCIAL INFORMATION:

Currently, the City only budgets for limited maintenance of existing streetlights. No new budget is being proposed to implement the proposed Streetlight Design Guidelines.

The Boards and Commissions were made aware that project by project approval will be the means to implement the proposed guidelines.

SUSTAINABILITY IMPACT:

The proposed guidelines emphasize and promote energy efficiency. A new light fixture is proposed to be added to the City inventory that can be easily converted to Light Emitting Diode technology when the City determines the technology is advanced enough to be cost effective.

ATTACHMENT(S):

1. Outdoor Lighting and Streetlight Design Guidelines (Exhibit A to Resolution)
2. Summary of changes to the current Outdoor Lighting Design Guidelines

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SUBMITTED BY: Christine F. Andersen, Public Works Director

APPROVED BY: City Administrator's Office



OUTDOOR LIGHTING AND STREETLIGHT DESIGN GUIDELINES

Summary of Changes

General

- ◆ The new Streetlight Design Guidelines have been incorporated together with an update of the 10-year-old Outdoor Lighting Design Guidelines. The committee working on this project felt it made more sense to have a "one source" document for the City's lighting requirements, which necessitated updating the Outdoor Lighting Guidelines at the same time.
- ◆ In addition to the previous review of the Streetlight Design Guidelines at the City's boards and commissions, a publicly noticed meeting was held with invitations sent out to lighting designers, electrical engineers, manufacturers' representatives, etc., to solicit input on the development of the Streetlight Guidelines and revisions to the Outdoor Lighting Design Guidelines.
- ◆ While some felt the document could be considerably shorter if redundant information was removed, it was generally agreed that the existing format that allows users, whether they be designers, reviewers, or staff, to find all the information needed in any given section, was useful and reflected the reality of its use.
- ◆ The new guidelines format has an Introduction, statement of Objectives, and path to Compliance, followed by two major subdivisions: the updated Outdoor Lighting Guidelines and the new Streetlighting Guidelines. These are followed by Appendices, including a glossary with illustrations, the text of the Outdoor Lighting Ordinance from the Municipal Code, a proposed compliance statement form, a comparison of lamp types and outputs, and plan review checklists.
- ◆ The Introduction adds new language that "recognizes that industry standards for recommended minimum light levels may not be compatible with or appropriate for the aesthetic standards of the City". In conjunction with this statement, City Council is requested to petition the California Energy Commission to categorize Santa Barbara in Lighting Zone 2 (LZ2), instead of the current LZ3, which is the same as Los Angeles.
- ◆ The Introduction also adds statements of intent regarding streetlighting.
- ◆ The Objectives statement emphasizes energy conservation and preserving the quality of the night sky, as well as objectives for streetlighting.
- ◆ The new section on Compliance suggests an approach to better compliance, recognizing that in the 10 years since the ordinance and guidelines were implemented, very few design reviewers or staff are aware of its requirements (or even existence), let alone being trained in its application. While it is important that a staff person be designated and trained to review applications for compliance, this proposed approach puts the responsibility on the preparer of the plans to certify that they have familiarized themselves with the Ordinance and Guidelines, and that the plans submitted comply. While no approach is likely to avoid all potential problems with lighting installations, it is hoped that this approach will not only make preparers of lighting plans more thoughtful about the City's requirements, but also be a useful tool should enforcement be required. Appendix C proposes compliance statements to be included on lighting plans for both Outdoor Lighting and Streetlighting projects.
- ◆ Checklists have been prepared for use by design review bodies and staff to aid in effective review of applications. These are specific to project type, i.e. parking lot, gas station, etc., and will serve as a reminder of what to look for, or ask for, on the plans, with references to the appropriate section of the Guidelines for more specific information. They will also be useful to applicants in preparing a complete submittal.

OUTDOOR LIGHTING & STREETLIGHT DESIGN GUIDELINES

Outdoor Lighting

- ◆ The requirement for “cut-off” lighting fixtures was generally changed to “full cut-off” to promote energy efficiency and dark-sky objectives.
- ◆ High Pressure Sodium (HPS) lighting was retained as the standard for parking lots, while use of Metal Halide was discouraged. However, the document recognizes newer and other lamp technologies may be acceptable if warm color quality can be demonstrated.
- ◆ The statement was added that fixtures with adjustable aiming angle are generally not allowed. This occurs in sections on parking lots, auto sales lots and gas stations, and security lighting.
- ◆ Additional information was added regarding lantern-type fixtures used for area lighting. They were previously limited to 100 watts, but now require techniques to shield view of the lamp unless they are cut-off or low output. This applies to parking lots, gas stations, etc.
- ◆ The statement requiring photocell and timer controls which occurs in various sections was changed to “controls as required by Title 24 Lighting Standards” since they are now a State requirement.
- ◆ The section previously titled “Exterior Sales and Service Areas” has been re-titled “Service Stations, Automobile Dealerships, and Exterior Sales Areas”. This is to reflect that this section primarily covers the first two uses, and other types of “exterior sales areas” rarely arise. This should help make it easier for users and reviewers to find the appropriate section.
- ◆ Illuminance levels for Automobile Sales have been subdivided into two areas. The previous specification for 70 foot-candles remains for the area now defined as Calle Real, Hope Avenue, and Hitchcock Way. Sales lots in all other areas of the City are limited to 30 foot-candles to assure that small dealerships on Chapala Street and Milpas Street aren’t lit to the same levels as the Auto Center dealerships. It is also required that lighting be considered for appropriateness with the ambiance of the neighborhood.
- ◆ A statement has been added to discourage the lighting technique, sometimes employed on auto sales lots, that positions lighting to increase reflections from windshields in order to attract more attention, the consequence of which is more nuisance glare.
- ◆ Landscape and Building Lighting section has minimal changes, except for statement calling attention to compact fluorescent lamps (CFLs) used in traditional fixture types (lanterns) where the lamp is exposed to view. It requires the use of a diffusing shade, diffusing glass panels, or lamp shape resembling traditional incandescent.
- ◆ Security Lighting section remains unchanged except for a statement discouraging fixtures with adjustable aiming angle.
- ◆ Several entirely new sections were added to the Guidelines. A new section was added for Parking Garages, because design board experience has shown that they occur more commonly now than when ordinance and guidelines were written 10 years ago. Primarily, this section focuses on a “transition” zone that occurs at the garage entrance recognizing a complex lighting problem: During the day, the entrance needs to be brighter than the garage interior to allow your vision to transition from bright daylight to the dim interior; but at night the opposite conditions exist, and your vision needs to transition from dim streetlighting to relatively bright garage interior. This is addressed with a requirement for controls to manage this dual lighting level. This section also requires that garage lighting be shielded from view. This section makes a foot-candle plot mandatory for the area from the garage entrance to the furthest interior point visible from the street.
- ◆ An new section was added for ATM machines. It mainly discourages more lighting than State law requires and addresses glare and compatibility with architecture. It also encourages small-size machines and minimal signage. The intent of this section is to discourage the use of ATMs as visual competition and as a means of attracting attention to a particular financial institution.
- ◆ A new section was added for Sports and Recreation Lighting. These particular projects are infrequent, and as they all have unique circumstances, this section is limited to basic considerations. It also serves to establish that such uses are in fact covered by the Ordinance and Guidelines.
- ◆ A new section was added for Sign Lighting. The existing Sign Ordinance and Guidelines do not contain much specific information on sign lighting, and it was deemed best to include it here as a primary resource for lighting information.

Streetlighting and Pedestrian Lighting

- ◆ This section has probably changed little in content since last reviewed by the Boards and Commissions. The information has been formatted for consistency with the Outdoor Lighting Guidelines. It is primarily a statement of objectives covering energy efficiency, ambiance, establishment of “opportunity corridors”, neighborhood identity, and reasonable standardization to control maintenance costs.
- ◆ It provides a framework for the Public Works (PW) Department and the design review boards and commissions to agree upon solutions for given situations in order to streamline PW's approval process. These understandings would be reflected on the “City Streetlight Map” which would be updated by PW and in their “Public Works Construction Standard Details” manual.
- ◆ This section also provides a framework for review and approval of pedestrian lighting, which are the fixtures and poles usually of a similar style but smaller scale than streetlights, and installed at a lower height and closer spacing than streetlighting.

Appendices

- ◆ Appendix A & B include information on exceptions and references to other documents that was previously located elsewhere in the original Outdoor Lighting Guidelines.
- ◆ The proposed compliance statement form is contained in Appendix C, which applies only to Outdoor Lighting projects. It was not deemed necessary for Streetlight projects.
- ◆ Appendix D contains a comprehensive glossary which provides useful information on common lighting terminology, descriptive information about design review boards and city agencies, and illustrations of common fixture types found in Santa Barbara.
- ◆ Appendix E provides two tables comparing the light output of different types of common lamps. With more new lighting technologies available and developing, all with different efficiencies, it was felt to be more useful to compare output brightness, rather than input watts. The tables are arranged in order of brightness, making it easy for users to relate the brightness of a compact fluorescent lamp to a familiar incandescent lamp.
- ◆ Appendix F excerpts the text of the Outdoor Lighting Ordinance from the Municipal Code. It is included to facilitate access to this information by designers, rather than having to find it on the City's website. In the print version of these Guidelines, a statement advises readers to check the City's website for revisions to the ordinance. In an online version of the Guidelines, there would simply be a link to that URL.
- ◆ Appendix G contains all the checklists corresponding to each section of the Outdoor Lighting Guidelines. These are formatted so that each is contained on separate sheets from other checklists, to facilitate printing the relevant checklist(s) that applies to a specific project for use in design review, or for including in project files.
- ◆ Appendix H is the Public Works Department's “City Streetlight Map” which is indicated as being available at the PW permit counter. It is a 24”x36” document, and was not considered necessary to include in copies of the actual Guidelines.